# STATE OF THE NATION'S WAISTLINE

**OBESITY IN THE UK:** ANALYSIS AND EXPECTATIONS

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# Foreword

It should come as no shock that obesity is one of the biggest threats to the UK, not only in terms of individual and collective health, but in terms of financial cost and societal impact.

There is an abundance of evidence to show the scale of this problem. We missed targets for obesity set out in the Health of the Nation report in 1992 by 400 per cent, but did not learn any lessons from this upsurge in obesity levels. And among the most quoted figures on the topic are those of the 2007 Foresight Report, which stated that almost half of the UK population could be obese by 2050, and that the total cost of this problem could reach £50 billion a year.

We are now more than seven years on from the publication of the Foresight Report and, if anything, the situation is now worse than it was in 2007. Without action across the board – from government, business, society and individuals – we might feel fortunate if only 50 per cent of the population is obese and the annual cost is only £50 billion in 2050, if current trends continue. Studies and data published since 2007 demonstrate the increased prevalence of obesity, morbid obesity and wider weight management issues. They show how widespread poor nutrition and food choices are amongst the population, and how little knowledge exists about proper hydration and its importance.

The purpose of this report is to audit the situation in the UK, to identify what initiatives and policy exists, and to assess their effectiveness in tackling obesity and weight management issues. Make no mistake, these issues must be addressed. Obesity and weight management are a direct cause of many health problems and are already placing enormous demands on the NHS at a time when health resources are stretched like never before. The current situation is unsustainable.

But it is not enough just to identify what the problems are. This report makes recommendations as to what we must do in order to address one of the great public health and societal problems of our time. There will be no quick fix. But from our analysis, there are clear signs that, however well intentioned, many of the current initiatives, policies and resources that exist are not as successful as they could be, and could be better directed.

We have released this report to coincide with the launch of National Obesity Awareness Week, which we will firmly establish in the calendar as an opportunity to engage with the public and raise awareness of obesity and weight management – but more importantly to discuss and highlight how these issues can be addressed at national, business, societal and individual levels.

I would like to thank Danone Waters for supporting the creation of this report. I must also thank those organisations and individuals who have contributed their knowledge and expertise both to this report and to National Obesity Awareness Week as a whole. These include the Cambridge Weight Plan, Disney, Annabel Karmel, HENRY (Health Exercise and Nutrition for the Really Young), Heart Research UK, the International Chair for Cardiometabolic Risk, Focus on Food, Nuffield Health, the College of Contemporary Health, the Whitehouse Consultancy and Fox Communications.

We hope that through our efforts we can inspire a national commitment – a New Year's Resolution – to tackling obesity.

Professor David Haslam
Chair, National Obesity Forum

# Executive Summary

## About the report

The purpose of this report is threefold. Firstly, to analyse existing research in order to offer an assessment on the scale of obesity in the UK and to consider how this might ether increase or decrease in the future.

Secondly, to summarise and review UK policy regarding weight management and obesity, and to provide comment on its effectiveness.

Thirdly, to offer recommendations as to what changes are necessary to reduce obesity levels in the UK.

This report has been prepared and written on behalf of the National Obesity Forum, a charity formed in 2000 with the remit of raising awareness of obesity in the UK and promoting the ways in which it can be addressed, including public-facing initiatives and the training of clinicians and healthcare professionals on how to identify and address weight management issues and obesity. The report is being released to coincide with the start of National Obesity Awareness Week 2014, a National Obesity Forum campaign to raise public awareness of obesity and the ways it can be tackled at governmental levels through the promotion of some policies and changes to others, and at a personal level through achievable and manageable lifestyle changes.

## Scale of obesity in the UK – an overview

**The Foresight Report (2007) concluded that half the UK population could be obese by 2050 at a cost of £50 billion per year. However, upward trends in obesity levels suggest these conclusions could be optimistic and could be exceeded by 2050.**

The current state of the UK is set out separately, but it is useful to provide a brief overview of the situation in order to establish the context within which existing policies and initiatives can be assessed.

Research by the Health & Social Care Information Centre has demonstrated sharp and substantial increases in obesity levels amongst adults and children between 1993 and 2011[1]. This has not only included Body Mass Indices (BMI) within the overweight and obese ranges, but also an increasing numbers of individuals with raised waist circumferences. These finding should be taken very seriously in any event given their source, but are backed by separate studies on adult obesity levels by the University of Glasgow[2] (that has demonstrated evidence of people getting fatter later in life), and levels of childhood obesity by Leeds Metropolitan University[3].

It should, however, be noted that the most recent figures published by the Health & Social Care Information Centre has shown a fall in the number of obese and overweight children in their final year of primary school in England for the first time in six years[4] - although this is counterbalanced by the facts that childhood obesity levels remain worryingly high and that any levelling off in obesity rates tends to be amongst the children of more affluent families. High levels of obesity amongst children in deprived areas remain.

Despite the most recent statistics of levels of English childhood obesity, the sum of these studies is a disturbing picture.

## The effectiveness of Government policy

**"We are failing too many of our children , women and young people on a grand scale. Health inequality, arising from social and economic inequalities, are socially unjust, unnecessary and unavoidable."**[5] **(Professor Sir Michael Marmot)**

Government policy on the subjects of weight management and obesity is analysed and assessed at length later in this document. However, it is worth briefly summarising what


1. Health & Social Care Information Centre, Statistics on obesity, physical activity and diet (England), 2013
2. Vlassopoulos A, Combet E & Lean, EJ, 'Changing distributions of body size and adiposity with age', International Journal of Obesity, 2013
3. Griffiths C, Gately P, Marchant PR, Cooke CB, 'A five year longitudinal study investigating the prevalence of childhood obesity', Journal of Public Health, November 2013
4. 'Obesity falls in English schools', BBC News (http://www.bbc.co.uk/news/health-25331997), 12 December 2013
5. Collins N, 'Britain faces 'public health time bomb'', Daily Telegraph, 30 October 2013

initiatives, projects and policies are currently in place, and to make some initial comments regarding their effectiveness that will be expanded upon throughout this document.

## The public and business

Two of the flagship Government initiatives in this area are the Change4Life programme and the Public Health Responsibility Deal. The former was established in light of the 2007 Foresight Report, from which the Government of the day clearly established that an obesity problem existed in the UK. Change4Life is intended to provide the public with advice on healthy diets and physical activity.

The Responsibility Deal was established to encourage businesses, including food and drink manufacturers and retailers, to do their part in reducing obesity levels by making it easier for individuals and families to make healthy choices. The Responsibility Deal has a collection of pledges that businesses are encouraged to commit to. This includes reducing the likes of salt and fat that can be harmful in products, encouraging people to reach their '5-a-day' of fruit and vegetables and reduce their saturated fat intake, putting calorie information on menus and products, and helping individuals to reduce their calorie consumption.

## Schools

Successive government have introduced guidance and requirements for schools on food standards relating to school meals, although not including packed lunches brought from home. These include guidance on what school meals are to include and what schools are not allowed to provide to pupils.

There have also been a range of additions to pupils' curriculums to help promote knowledge of healthy eating and participation in physical activity. This has included the School Food Plan and the introduction of cookery / food technology lessons that are intended to provide pupils with knowledge of how to cook, and of healthy eating.

An announcement by the Department for Education (DfE) in September 2013 also committed schools to a new national curriculum for physical education. All schools are required to deliver physical education to pupils in all four key stages of education. The DfE announcement of September 2013 introduced a new focus on competitive sport and increased physical activity. Additional funding of £150 million was also announced to improve the provision of physical education and sport in primary schools.

## General Practitioners

General practitioners (GPs) have been subject to the Quality Outcomes Framework (QOF), a voluntary incentive based initiative that measures and financially rewards GPs and their surgeries for delivery on a wide range of indicators.

This has included indicators on obesity and on physical activity. However, the process for determining the indicators is a complex one and QOF is expected to undergo significant change in the coming months.

The indicator on obesity has to date only required GPs to register their obese patients. There is no requirement for them to take action or to engage their patients in discussions about weight management during the course of medical appointments, during which the patient is unlikely to present themselves with concerns about their weight but will instead present issues that are clearly weight related.

## Healthy living rather than healthy eating

It would be wrong to roundly criticise government policy. Initiatives such as Change4Life are extremely important in helping to educate the public and promote better choices. Similarly the Responsibility Deal reflects the self-evident fact that business and the food and drink industry must be on-side if issues of weight and obesity are to be effectively addressed.

There are, however, significant gaps that must be addressed.

An individual's intake of salt, trans fats and sugar remains enormously important. Issues such as proper hydration are also largely being overlooked in favour of healthy eating. A study conducted in 2012 by researchers at the University of North Carolina demonstrated a 2%-2.5% average weight loss amongst adults who swapped calorific beverages for non-calorific ones (e.g. water) over a six month period[6] as a weight loss strategy. A separate UK study measuring the water consumption of children over a 14 day period has also concluded children display poor hydration habits and are not getting enough water in the morning[7]. This conclusion, while concerning, is not limited to the UK. Similar studies have reached the same conclusions about French school children[8].

While these studies provide only a snapshot, they are indicative of a wider body of evidence demonstrating the

6. Tate DF, Turner-McGrievy G, Lyons E, Stevens J, Erikson K, Polzien K, Diamond M, Wang X, Popkin B, 'Replacing calorific beverages with water or diet beverages for weight loss in adults', 2012 (randomised clinical trial)
7. Derbyshire EJ, 'An intervention to improve cognition and hydration in UK school children using bottled water', 2012
8. Bonnet F et al, 'French children start their day with a hydration deficit', 2012

effectiveness of proper hydration as part of a broader approach to healthy living rather than an emphasis on healthy eating specifically. This is best demonstrated by the so-called 'eatwell plate'[9] that identifies the different proportions of food to achieve a balanced diet. Minimal guidance is provided as to what one should drink, when poor drinking habits can undermine any amount of healthy eating.

In spite of the efforts of Change4Life and also new initiatives for physical education in schools, the importance of physical activity also tends to take a backseat to healthy eating.

## Prevention rather than cure

It also remains the case that many governmental interventions, policies and initiatives are focused on the promotion of healthy eating/living for individuals who, while potentially having some weight management issues, are not obese – and indeed may never be.

Comparatively little in the way of support and guidance exists for individuals who find themselves in the position of being obese or even morbidly obese. There are similarly significant deficiencies (discussed in greater detail later in this document) in GP knowledge of weight management as an issue. Questions should also be asked as to the level of GP knowledge of the support services for the obese and overweight that will exist, including those in their local communities.

## Summary

Weight management and obesity represent significant public health issues for the UK, and it is entirely reasonable to conclude that the determinations of the 2007 Foresight Report (i.e. that half the population might be obese by 2050 at an annual cost of nearly £50 billion), while shocking at the time, may now underestimate the scale of the problem.

Clear evidence exists of a substantial proportion of children being overweight or obese, and while recent figures have suggested situation may be improving, should still cause concern. This, as noted above, is particularly troubling in light of evidence that also suggests people are getting fatter in later life. Should children already be in the position of being overweight or obese by the time they reach their adulthood and later years, it is likely that these problems will not only continue but will be exacerbated.

9. NHS choices website (http://www.nhs.uk/Livewell/Goodfood/Pages/eatwell-plate.aspx)

# Key Recommendations

- Schemes such as Change4Life are well intentioned and extremely important. However, they cannot be expected to alter the public situation on their own, despite their merits. Harder hitting campaigns, similar to those for anti-smoking, are required.
- GPs should be encouraged to engage with patients on obesity and weight management issues. The requirements of the Quality Outcomes Framework (as of December 2013) for GPs to simply register obese patients is unfit-for-purpose and in fact counterproductive. It provides no encouragement to GPs to engage with their patients and effectively penalises GP for taking action to improve their patients' outcomes and help remove them from the obesity register.

  The Quality Outcomes Framework must continue to include indicators on obesity. These should, however, focus on the action taken by primary healthcare professionals on behalf of overweight or obese patients.
- GPs should be encouraged and indeed required to make every contact with patients count. Very few patients will cite obesity or weight management as the reason for seeing their GP, and will instead present with conditions that are clearly a result of weight issues. GPs should talk with their patients about weight in these instances.
- Greater training of primary healthcare professionals on obesity and weight management is required. The Department of Health should encourage training and accreditation schemes that exist on this subject, as these will help GPs in making every contact with patients count. This includes increasing awareness amongst GPs of the importance of waist measurement during medical appointments in order to identify indicators of visceral adiposity or ectopic fat deposits, which can adversely affect health outcomes.
- Government initiatives should include a greater focus on the importance of good hydration in weight management and health outcomes. By focusing primarily on healthy eating and food choices, existing guidance overlooks the undermining effect that poor hydration choices can have – and equally the benefits of good hydration choices such as water. The Eatwell plate, for example, could be usefully re-designed replacing soft drinks with water and incorporating reduced carbohydrates and a redefinition of fats.
- Greater focus needs to be devoted to strategies supporting individuals who are already obese. Current government policy is focused largely on prevention, which is vital in ensuring the scale of the obesity problem and its associated costs do not increase. It does not, however, address the problems of those people already obese or morbidly obese and the costs associated with their health conditions.
- The introduction of compulsory physical education in schools is positive. However, greater promotion of physical activity outside of educational settings is also key to ensure any participation amongst pupils is not limited to school. Similarly, caution is needed to ensure that the promotion of competitive sport does not put off children less disposed to that sport. This could result in children either returning to or increasing their sedentary lifestyle.

# The current state of the UK

## The UK

Obesity in the UK is on the increase.

Research by the Health & Social Care Information Centre of obesity levels in England has concluded that there has been a sharp increase during the period 1993 to 2011 in the number of men and women with Body Mass Indices (BMI) outside the normal range. Additionally, these figures also highlighted that nearly a third (31%) of boys, that more than one in five girls (28%) aged between two and 15 years were classified as either overweight or obese, and that a rise in waist circumference has outstripped increases in BMI measurements, suggesting a rise in harmful central obesity[10].

The figures of the Health & Social Care Information Centre are by no means stand-alone findings. ***The Health Survey for England (2010) has suggested that 26.1% of adults (classed as being over 16 years of age) are considered obese, with the proportion of adults with a healthy BMI falling to just 30.9% amongst men and 40.4% in women***[11]. Further studies, such as an analysis of data for Scottish and English subjects by researchers at the University of Glasgow concluded nearly 40% of men and women are reaching the point at which they can be described as obese[12]. Researchers also determined that the individuals whose data was analysed during for the study had demonstrated increasing waist circumferences with age in addition to increased BMI.

New figures published by the Health & Social Care Information Centre have indicated some improvement in the weight/obesity levels of children, with moderate decreases in the percentage of overweight and obese children in the 2012/13 Reception Year (22.2%) compared with those of 2011/12 (22.6%) and 2006/7 (22.9%). There is also evidence of improvements amongst children in Academic Year 6 for 2012/13, with 33.3% of children considered to be overweight or obese compared with 33.9% in 2011/12[13]. This, however, is still substantially greater than levels in 2006/7, when 31.6% of children in Academic Year 6 were considered overweight or obese.

While a welcome improvement, it must still be noted that the most recent figures demonstrate that more than one in five children in their Reception Year and nearly a third of children in Academic Year 6 are considered overweight or obese. A separate study by researchers at Leeds Metropolitan University has also concluded children appear to be getting fatter. This research measured the waist circumference and BMI of children aged 11-12 years, and then again when aged 13-14 years and 15-16 years[14]. It additionally concluded that children displayed central adiposity from waist circumference measurement and a stabilisation of BMI.

There is also evidence of the UK population failing to lead what would be described as a healthy lifestyle – with figures from the Health & Social Care Information Centre showing that only 36% of adults participated in 30 minutes of moderate physical activity once a week. The recommended level of exercise is five sessions of 30 minutes' moderate physical activity. Other findings showed that only 29% of women and 24% of men get their five portions of fruit and vegetables a day – the figures for children are less than 20%[15].

## International comparison

The figures paint a particularly poor picture of the state of health in the UK, as regards weight management and obesity. Indeed a recent report by the Word Health Organisation has described the UK as facing a "public health time bomb"[16] and that obesity rates in the UK are "just about the worst in Europe".

Research by the respected Organisation for Economic Co-operation and Development (OECD), based on analysis of official figures from OECD countries, has found that 'overweight' (including obesity) rates for boys and girls, based on measured height and weight, are 23% and 22% respectively, although these figures do reflect measurements being taken at different ages in different countries[17]. The OECD has also reported that countries including Canada, Denmark, Norway and Portugal demonstrate higher levels of children consuming fruit and vegetables than the UK


10. Health & Social Care Information Centre, Statistics on obesity, physical activity and diet (England), 2013
11. Health Survey for England 2010, Public Health England
12. Vlassopoulos A, Combet E & Lean, EJ, 'Changing distributions of body size and adiposity with age', International Journal of Obesity, 2013
13. Health & Social Care Information Centre, National Child Measurement Programme: England 2012/13
14. Griffiths C, Gately P, Marchant PR, Cooke CB, 'A five year longitudinal study investigating the prevalence of childhood obesity', Journal of Public Health, November 2013
15. Health & Social Care Information Centre, Statistics on obesity, physical activity and diet (England), 2013
16. Collins N, 'Britain faces public health time bomb', Daily Telegraph, 30 October 2013
17. Organisation for Co-operation and Economic Development, Health at a glance: OECD Indicators, 2013

(in Denmark this equates to 56% of girls and 34% of boys), although there was evidence of declining levels of physical activity that are similar to those in the UK.

The OECD has concluded that since 2000, *"obesity rates (amongst adults) have increased by a third or more in 16 countries"*. Average consumption of fruit and vegetables across the 28 OECD countries also appears to be higher than the UK, with 64% of men and 73% of women reporting daily vegetable consumption – although this does not show that these populations are meeting the UK recommended five pieces of fruit and vegetables per day.

## Summary of data

The existing data regarding levels of excess weight and obesity with the UK population paint a grim picture. It demonstrates a consistent and substantial rise in obesity levels during the last 20 years. There is also significant evidence, based on OECD and World Health Organisation analysis, that the UK compares unfavourably with obesity levels in other countries.

With research showing substantial levels of obesity amongst children (almost one third of Academic Year 6), reduced levels of physical activity and fruit/vegetable consumption, and finally that older members of society experience increased waist circumference and higher BMI measurement, there is cause for concern that levels of obesity in the UK will only continue to grow without significant intervention. Given that the UK's population is an ageing one, with longer life expectancy (the Office of National Statistics has recently suggested that living in excess of 100 years could soon become the norm[18]) and a significant proportion of the population now in middle to old age, this leads to a conclusion that a sizeable percentage of the population will suffer from weight management issues that could extend to obesity or even morbid obesity.

## Influence of obesity and health strategies

In 2011, the Government published its anti-obesity strategy Healthy Lives, Healthy People: A call to action on obesity in England[19]. This set an ambitious overall goal of reducing the national energy intake by five billion calories a day in order to bring the nation back into a "collective energy balance".

The strategy set out action in a number of areas to tackle obesity, including empowering individuals (through information, guidance, and the use of behavioural science); giving partners the chance to play their part (e.g. through the public health responsibility deals); giving local government a leading role in driving health improvement and using partners at a local level; and building an evidence base on effectiveness and cost effectiveness to identify and spread best practice.

However, little has been heard of the strategy since its publication, and it is far from clear what impact it has had on the nation's health. A much more determined approach is needed from the Government to ensure that obesity is being effectively tackled.

The Government's flagship anti-obesity campaign is Change4Life, a national social marketing campaign that began in 2009. The campaign is focused on encouraging families and middle-aged adults to make changes to their lifestyle – including diet, activity levels and alcohol consumption. The aim is that changes are not drastic, but small and sustainable, with a significant impact on health over a period of time.

Change4Life has focused on areas such as 5-a-day, cutting back on fat, salt, sugar and alcohol, and being physically active on a daily basis. While such initiatives are of course

welcome, so far Change4Life has not had enough of an impact to make a significant difference to the scale of the obesity problem. In particular, the changes suggested will not be significant enough for those who are already significantly overweight or obese. It is also important to note that the continuation of the Change4Life programme was reviewed in 2010, and while it was retained, it has experienced substantial reductions in its funding.

While Change4Life is a useful part of an overall strategy, it cannot make up the whole of the Government's approach. There is a need for hard hitting public health campaigns, along the lines of anti-smoking campaigns.

18. Bingham J, 'Two thirds of today's babies could live to 100', Daily Telegraph, 12 December 2013
19. Healthy Lives, Healthy People: A call to action on obesity in England, Department of Health, October 2011

# Primary healthcare professionals' engagement with obesity

GPs have a key role to play in preventing and tackling obesity. Of all medical professionals, they will have contact with the widest range of patients, and so are best placed to identify those patients who are obese or overweight.

They are also best placed to provide tailored advice on the full spectrum of options available to treat obesity and prevent the complications which can occur, such as cardiovascular disease, type-2 diabetes and strokes. This could range from lifestyle advice to help patients improve their diet and increase physical activity to specific structured weight management programmes. Early intervention will help avoid the later need for referral to secondary care.

The NHS Future Forum, set up as part of the recent NHS reforms, called upon GPs to "make every contact count". The NHS Constitution calls on healthcare professionals to "to take every appropriate opportunity to encourage and support patients and colleagues to improve their health and wellbeing"[20]. Obesity is a perfect illustration of how embracing this call could enable GPs to transform the nation's health.

There are, however, a number of barriers in place that prevent the full potential of GPs in this area being realised. This includes the incentives in place through the Quality and Outcomes Framework (QOF), the training available to GPs on the topics of weight management and obesity, and the reluctance of GPs to broach the subject of weight with patients for fear of causing embarrassment or offence.

This chapter explores some of these barriers and makes recommendations to help GPs fulfil their potential in preventing and tackling obesity and improving the health of their patients.

## Getting the incentives right: the Quality and Outcomes Framework

### About the QOF

This Quality and Outcomes Framework (QOF) was introduced in 2004 as a voluntary incentive scheme for GP practices in the UK. It contains groups of indicators against which practices score points according to their level of achievement, with a higher score leading to higher financial rewards. The aim of the QOF is to highlight priorities for improving patient care and provide incentives for GPs to drive up quality in these areas.

QOF indicators are intended to identify areas where responsibility lies mainly with GPs in primary care, where there is evidence of health benefits from improved primary care, and where the disease is a priority in a number of the devolved nations.

### How does this relate to obesity?

The increase in the level of obesity demands that it must be recognised as a health priority across the UK. This is recognised with the inclusion of one QOF indicator relating to obesity: "if a practice can produce a register of patients aged 16 or over and with a BMI greater than 30 in the preceding 15 months" then eight points are added to the QOF score.[21]

20. National Health Service, 'The NHS Constitution', March 2013
21. 'QOF Clinical Indicators 2013/14', eGuidelines.co.uk (http://www.eguidelines.co.uk/eguidelinesmain/external_guidelines/qof.php#.UqmKuOJ9-np)

The problem with the current approach is that this indicator requires no action – aside from the production of a register - to be taken for any points to be received. Additionally, in contrast to the one indicator for obesity, there are 15 indicators which relate to the recording and management of diabetes. These indicators measure a range of issues, from specific measurements on the current state of health of the practice's diabetes patients to whether they have had a flu vaccination. The diabetes indicators remain outstanding, but given that obesity is a major contributor to type-2 diabetes, it is essential that GPs are provided with better incentives to tackle obesity before it leads to major health complications.

## What more could be done?

GPs are in an ideal position to identify people who are overweight or obese and to offer them advice on the range of options that exist for achieving a healthier weight. However, the QOF as it stands not only fails to provide any incentive for GPs to offer such advice to patients, but effectively penalises them if they do so.

There is a strong argument that that the QOF should contain an indicator that would award points to incentivise and encourage GPs for providing advice on weight management and recommending appropriate guidance and support from the wide range of resources available to tackle obesity, including the range of structured community based weight management programmes which are available.

The Academy of Medical Royal Colleges has backed this call to reform the QOF to provide better incentives for GPs. It argued that the governments of the four home nations should invest £100 million a year in extending access to weight management services, spanning the full spectrum from early intervention services to provision for severe and complex obesity[22]. This is not to suggest that any indicator should reward GPs for how much weight their patients lose – as this relies heavily on patients' engagement and ultimately cannot be controlled by GPs. Nevertheless, the incentive to talk to patients about weight loss should be considered an imperative.

Such an indicator, combined with access to the appropriate weight management services, would help prevent the onset of complications from obesity, such as heart disease, stroke and type-2 diabetes, as well as an increased risk of stroke and some cancers. If overweight or obese patients are provided with appropriate advice at an early stage, this can also reduce the need for expensive interventions in secondary care at a later stage.

Despite support for a campaign for a better QOF indicator from a variety of sources, there have been suggestions of scrapping the single QOF indicator relating to obesity altogether. This would be a retrograde step which would demonstrate a lack of willingness on behalf of the Government to really tackle this problem.

## Encouraging GPs to start a conversation

While putting the right incentives in place will encourage GPs to take a proactive role, there are other factors to consider in ensuring that GPs and their patients are having the right conversations. The fact remains that having a conversation with patients about their weight is not an easy job for doctors.

"Fat" remains an emotive subjective, often with a stigma attached. The weight of the population continues to rise despite the media imagery encouraging an ultra slim ideal that is far out of reach for most of the public. Part of the result of this is that being called "fat" is viewed as an insult and that no one likes to be told that they are overweight, even by a healthcare professional who has the best interests of the patient's health at heart. If patients react defensively, then they are less likely to take the advice offered by their GP; it also makes some GPs less likely to raise the topic with patients due to fear of the reaction. This has been a longstanding problem: a 2007 study of two-inner London primary care organisations revealed that only 38 per cent of GPs were likely to raise the issue of a patient's weight[23].

Patients are also less likely to engage with their GP if they consider weight management will be discussed. A study of obesity management amongst GP practices in Bristol found less than half of 285 families (134) consulted their GP when invited to a consultation on the basis that one or more children within the family had a BMI considered to be within the obese range. Of these consultations that took place within three months of the invitations being sent, only 42 discussed the child's weight of which 19 led to secondary care referrals and six to weight-management referrals.[24]

This potential for conflict was recognised by the National Institute of Health and Care Excellence (NICE) in its draft guidance on Managing overweight and obesity in adults – lifestyle weight management services.[25] The draft guidance, published in October 2013, recognised the need for GPs to be respectful of patients and to not blame them for

22. 'Measuring Up: The Medical Profession's Prescription for the Nation's Obesity Crisis', Academy of Medical Royal Colleges, 2013
23. Michie S, 'Talking to primary care patients about weight: A study of GPs and practice nurses in the UK', Psychology, Health & Medicine, Vol. 12 Issue 5, 2007
24. Banks J, Shield JPH & Sharp D, 'Barriers engaging families and GPs in childhood weight management schemes', The British Journal of General Practice, August 2011

becoming obese. It stated that GPs should "ensure the tone and content of all communications or dialogue is respectful and non-blaming. The terminology used to describe the person's condition should respect individual preferences."

When providing advice on losing weight, NICE recommends that GPs provide sensitive, realistic advice on how much weight patients can hope to lose, while being careful to emphasise that is no "magic bullet".

Nevertheless, it is vital that these conversations take place – whether people go to see their GP because of a condition directly related to their weight (through patients will often not associate their condition with a weight management issue), or because they are feeling unwell for another reason. Where GPs do find it difficult to have these conversations, they should be provided with the right training and support to allow them to take a more proactive role.

## Improving the quality of training for GPs

Alongside providing the right incentives for GPs, they must have appropriate training to provide useful advice to patients. Professor Tony Leeds of the University of Surrey has highlighted the fact that specific training on obesity management is missing from most GP training programmes, and most GPs are better equipped to deal with the consequences of obesity, such as heart disease, type-2 diabetes, and osteoarthritis, than they are to help patients deal with the underlying weight gain which has caused the problem[26].

Professor Leeds has suggested that, as well as obesity management being integrated into the curriculum for GPs (as well as those for nurses and pharmacists), each general practice should provide funding for an 'obesity team', with a designated GP acting as the 'lead' in day-to-day weight management for the practice.

The National Obesity Forum currently undertakes a large amount of work to improve the skills of GPs in improving obesity. This includes:

- an Annual National Conference for all healthcare and allied professionals
- regional Network Groups for healthcare professionals to share best practice
- a dedicated website include free educational material
- clinical guidelines and tools made available to help with weight management provision
- a NOF obesity strategy model
- links with existing service providers of best practice that are willing to share advice
- a one day diploma in obesity
- an MSc in weight management in conjunction with the University of Chester
- advice to the College of Contemporary Health in developing their new courses on obesity

The National Obesity Forum is also in the final stages of discussion with a leading university to develop a more comprehensive PwSI (Practitioner with Specialist Interest) course in weight management aimed specifically at those healthcare professionals wishing to work in the field of weight management. The widening of access to such resources would assist GPs in the management of patients' obesity and weight management issues.

It is additionally important that GPs measure the waist of patients as well as simply calculating their BMI. As central obesity, where excess fat is stored around the abdominal area, is the most dangerous to health, this measurement is a further useful tool in identifying the patients who are most at risk, including of the build-up of ectopic fat around major organs. Particularly in older groups, patients can have a normal BMI while having a waist measurement which places them into the high risk category. The International Chair on Cardiometabolic Risk (ICCR) has said that "Measuring both waist girth and BMI can have a profound impact on patient risk and treatment".

## Summary

- The Quality and Outcomes Framework needs to be amended to provide incentives for GPs to proactively offer advice to overweight and obese patients and refer them to weight management services where appropriate, rather than simply keeping a register of these patients.
- GPs should be provided with appropriate support and training to help them have the necessary conversations with patients.
- Better quality training should be provided both during GP training and for current GPs to help them provide better advice to patients.
- GPs should measure waist circumference rather than just BMI to help them identify patients who most at risk and identify the indicators of poor health outcomes.

25. 'Managing overweight and obesity in adults – lifestyle weight management services' (draft version). National Institute for Health and Care Excellence, 2013
26. Dr Tony Leeds, GP practices 'need obesity specialists', available: http://www.bbc.co.uk/news/health-14064561, last accessed 11th December 2013.

# Healthy living, not healthy eating

## Summary of current public health promotion strategies

To date, much of the focus of initiatives to prevent and reduce obesity has been on healthy eating, and particularly on reducing the number of calories people consume.

The Government's flagship social marketing campaign, Change4Life, recognises the importance of both areas in its tagline "eat less, move more, live longer". The website provides a full range of information on how to eat more healthily, including tips on shopping, advice on all the key meals of the day, and specific pages on salt, fat and sugar[27]. A separate section also provides advice on how to cut alcohol intake.

The "get going" section provides information on physical activity. It is more focused on activity that can be incorporated into everyday life than on structured exercise – although there is advice on active hobbies and a Couch to 5k app, designed to help novice runners get started[28]. Change4Life also encourages the public to swap unhealthy products within their diet for healthier ones.

In terms of policy specifically focused on children, the recently published School Food Plan provides a comprehensive plan to improve the quality of food provided to children in schools. Developed by Leon founders Henry Dimbleby and John Vincent, the plan sets out a series of actions designed to increase uptake of school meals and to ensure that these meals are not only nutritious but also appetising. The plan also contains a comprehensive set of nutritional standards for school meals, which will be consulted on in early 2014. This focus on improving the quality of school meals is to be welcomed, particularly as it is designed to demonstrate that food can be delicious as well as healthy. However, it is too early to make an informed assessment as to its effectiveness in improving the knowledge and nutritional choices of children and young people.

The importance of initiatives such as the School Food Plan have been firmly demonstrated, and the most recent research by Leeds Metropolitan University has demonstrated that children appear to be getting fatter, highlighting the need for urgent changes to school nutritional habits and children's education on healthy choices[29]. A number of company-run corporate and social responsibility (CSR) programmes also exist and operate in schools. These include the Change4Life partner programme 'Eat Like a Champ', which uses popular role models to support greater understanding of healthy eating and hydration, and also of the balance between energy consumption and output. The initiative has been the subject of an independent study by the Children's Food Trust, which has suggested the programme is helping to influence children's understanding of healthy eating and hydration.

27. Change4Life, Easy, Tasty Ideas for Health Eating, (http://www.nhs.uk/Change4Life/Pages/healthy-eating.aspx), last accessed 11th December 2013
28. Change4Life, Easy Ways to Be More Active, (http://www.nhs.uk/Change4Life/Pages/be-more-active.aspx), last accessed 11th December 2013
29. Griffiths C, Gately P, Marchant PR, Cooke CB, 'A five year longitudinal study investigating the prevalence of childhood obesity: comparison of BMI and waist circumference', Journal of Public Health, November 2013

# The importance of physical activity

Food and healthy eating is only one part of improving health outcomes – the British Heart Foundation recommends that to maintain their health, children take part in a minimum of 60 minutes of at least moderate intensity physical activity every day. This could include PE lessons, but also swimming, dancing, cycling, most other sports and brisk walking, as well as active play. Adults have been recommended to take part in 150 minutes of moderate intensity activity every week – but evidence suggests that in England only one in 20 people meet this recommended level of activity.[30]

The current quality and prevalence of physical activity in schools is variable. The Ofsted Physical Education report published in February 2013 found that the physical aspect of physical education was not doing enough to tackle sedentary lifestyles amongst children and young people, with teachers often spending too much time talking and not enough time getting children moving. The report concluded that one in five children leaves primary school unable to swim, while not enough is done to help the most able children make the most of their abilities.[31]

A new National Curriculum for PE in schools has been developed and will come into force in September 2014, but at the moment it is difficult to tell what kind of impact this will have.

There is no equivalent to the School Food Plan to ensure that children get enough physical activity to maintain their health and are encouraged to form good that which will last them the rest of their life. In the same way that the School Food Plan focused on ensuring that food is both tasty and healthy, a strategy is needed to demonstrate to school children that physical activity is not only important, but can also be fun. It needs to look at how the talent of future Olympic stars is nurtured, but as, if not more importantly, also how the less athletically inclined can be helped to develop good habits – which may involve fitting physical activity into everyday life, rather than taking part in structured competitive sport. Experts have recently claimed that the lack of a physical activity strategy for children is complicit in mass child neglect[32].

The importance of fitting activity into everyday life is also important for adults, particularly the increasing number who work at sedentary desk jobs. There is a role for local authorities in ensuring access to affordable, accessible exercise venues. But realism is required about the fact that many people will not want to go to the gym or take part in structured activity – and that for many of those in lower socio-economic groups, lack of disposable income makes this even less likely.

This is particularly true for those who are already obese, many of whom struggle to know where to start with exercise or feel self-conscious next to regular gym-goers. By highlighting the importance of smaller lifestyle changes, such as increasing the amount of (brisk) walking people do, reducing car use and taking part in active hobbies, steps can be taken to improve the health of the population.

There is a need to be realistic about the fact that for most people this will not lead to significant weight loss – but it will help to maintain health and could provide a stepping stone towards more intensive exercise.

# The importance of hydration

There is a tendency in discussions on obesity to focus on what people eat, rather than what they drink – despite the important role of hydration in the diet. The European Food Safety Agency (EFSA) recommends a total water intake of 2.0 litres a day for adult women and 2.5 litres a day for adult men under normal conditions. A greater intake is needed for those taking part in intense exercise, those who are pregnant or sick, or when the weather is particularly hot or humid. While some fluid in the diet will come from food, the majority of this will come from drinks throughout the day.

There are two related issues to consider. The first is the importance of adequate fluid intake to maintain good health. Studies have proven that poor hydration can affect brain function[33]. The benefits of an adequate fluid intake – particularly water – include maintaining a proper fluid balance within the body, maintaining normal bowel and kidney function, controlling hunger and maintaining an optimum cognitive ability. It is also an essential element of exercise.

Yet it is not clear that the people of the UK are remaining properly hydrated. The initial findings of the UK Fluid Intake Study, published in 2012, found that 30 per cent of adults had inadequate intakes of fluid – as did more than 50 per cent of children.[34] The study also found low levels of water consumption in relation to hot beverages and sugar sweetened beverages. These figures are backed by separate

30. Health and Social Care Information Centre. 'Statistics on Obesity, Physical Activity and Diet: England, 2013', Health and Social Care Information Centre, February 2013
31. Ofsted, 'Beyond 2012: Outstanding physical education for all', February 2013
32. Weiler R, Allardyce S, Whyte GP, Stamatakis , 'Is the lack of a physical activity strategy for children complicit mass child neglect?', British Journal of Sports Medicine, 9 December 2013
33. Leibermann HR, 'Hydration and cognition: a critical review and recommendations for future research', Journal of the American College of Nutrition, 2007
34. Gandy J, 'First Findings of the United Kingdom Fluid Intake Study', Nutrition Today, July/August 2012

studies commissioned by the Department of Health and Food Standards Agency. This body of research has shown that children aged four to ten years typically consume 276ml of water per day and 620ml from other beverages (of which 216ml was milk). Children and young people aged 11 to 18 years were found to consume 453ml of water per day and 680ml of other beverages, of which 150ml was milk[35].

These findings lead to a second issue requiring consideration: the contribution of fluid intake to calorie consumption. The initial findings of the UK Fluid Intake Study found that on average, sugar sweetened beverages provided 175 kcal per day of the calorie intake of children. This demonstrates the contribution that sugar sweetened beverages are making to rising levels of obesity.

A study published by the British Journal of Nutrition in 2012 showed that, in 2008/09, beverages accounted for 21%, 14% and 18% of daily energy intake for children aged 1.5–18 months, 4–18 years, and adults (19–64 years) respectively.[36] The study noted that, since the 1990s, there had been an increased consumption of fruit juices (as well as reduced-fat milk) among children, while adults saw similar trends but additionally saw an increased consumption of alcohol. The study highlighted that using water as a substitute for caloric beverages may reduce overall energy intake.

From a policy perspective, this leads to an imperative to acknowledge the contribution of sugar sweetened beverages to the diet and take steps to reduce this level. Many people will pay attention to what they eat, while overlooking the fact that sugar sweetened beverages can make a significant contribution to the amount of calories they consumer.

In particular, there is a tendency to overlook the contribution that fruit juices and smoothies can make to sugar intake. While such drinks can provide one portion of the daily fruit and vegetable intake, the amount of sugar contained is similar to many carbonated beverages, the acidity can have a negative impact on dental health, and many of the juices lack the fibre content of fruit and vegetables, lessening the benefits to digestive health.

Policy should focus on reducing the amount of sugar in beverages, reducing the amount of sugar sweetened beverages that are consumed, and promoting water or low calorie alternatives as the best way of remaining hydrated. Change4Life acknowledges this need, recommending that “all the family swapping to water, milk (ideally semi-skimmed, one per cent or skimmed), or sugar free drinks can really make a difference.” However, there is a need to make this more prominent in public health messaging.

## Summary:

1. Initiatives such as Change4Life are important in demonstrating how individuals can improve their choices in terms of healthy eating. These healthy eating messages need to be supported by good hydration and physical activity habit.
2. An equivalent to the School Food Plan should be produced to look at how we can increase the levels of physical activity in school, focusing on two separate aims - developing the abilities of future professional athletes, but also showing all children that there are fun and easy ways to fit physical activity into their lives.
3. More needs to be done to ensure that both adults and children take advantage of the opportunities to fit exercise into their everyday lives.
4. The importance of hydration, and the range of benefits which it provides, needs to be considered when developing strategies to promote healthy living.
5. There is a particular need to focus on the kinds of drinks which people are drinking, which people encouraged to swap sugar sweetened beverages for water or other low calorie alternatives.

35. Bates B et al, ‘National diet and nutrition survey: headline results from years one, two and three (combined) of the Rolling Programme (2008/9-2010/11)’, Department of Health and Food Standards Agency, 2012
36. Ng SW, Ni Mhurchu, C, Jebb S & Popkin B ‘Patterns and Trends of Beverage Consumption Among Children and Adults in Great Britain, 1986– 2009’, British Journal of Nutrition, 2012

# Expectations for the future and conclusions

There is currently insufficient evidence to suggest that levels of obesity in the UK will be arrested in the short, medium or long-term as a result of current strategies, policies and interventions.

Very serious concern should be given to the scale by which obesity levels have risen in the UK over the last 20 years. It has been an exponential increase. It should further be concerning that there is a body of evidence to suggest that the population can expect increasing BMIs and waist circumferences as they get older (albeit that BMI is known to decline after the age of 70 due to factors including intercurrent illness, although individuals in this age bracket experience increasing sarcopenic adiposity). This must be viewed through the context of the UK having an ageing population. It therefore stands to reason that there will be more individuals in this position over the coming years. With particularly the likes of waist circumference being a key indicator for health outcomes, notably abdominal obesity and the build-up of ectopic fat, this evidence suggests that there will be a decline in health outcomes and the considerable potential for sizeable increases in the diagnoses of conditions such as type-2 diabetes and heart disease – in addition to other conditions that can be attributed to obesity and weight management issues.

A further aspect of concern is the levels of UK childhood obesity. While recent figures from the Health and Social Care Information Centre suggest moderate improvement in levels amongst Reception Year and Academic Year 6 pupils, it is questionable in light of other evidence whether these will be either sustainable or are representative of other younger age groups.

The prevalence of sedentary existences amongst children and young people – highlighted by declining levels of physical activity – coupled with evidence of decreased consumption of fruit and vegetables, suggest that significant numbers of children will continue to experience weight management issues and obesity. Given the increase in obesity levels amongst older generations, this suggests that the scale of the overall problem in the UK will continue to grow, but also underlines the importance of interventions with young people to help them establish good eating, hydration and physical activity habits.

While this report does not assess financial cost of obesity, it can conclude that there is a serious risk of the predictions set out in the 2007 Foresight Report – i.e. that 50% of the population would be obese by 2050 – will be exceeded.

# References


1. Banks J, Shield JPH & Sharp D, 'Barriers engaging families and GPs in childhood weight management schemes', The British Journal of General Practice, August 2011
2. Bates B et al, 'National diet and nutrition survey: headline results from years one, two and three (combined) of the Rolling Programme (2008/9-2010/11)', Department of Health and Food Standards Agency, 2012
3. Bonnet F et al, 'French children start their day with a hydration deficit', 2012
4. Change4Life, Easy, Tasty Ideas for Health Eating, (http://www.nhs.uk/Change4Life/Pages/healthy-eating.aspx), last accessed 11th December 2013
5. Change4Life, Easy Ways to Be More Active, (www.nhs.uk/Change4Life/Pages/be-more-active.aspx), last accessed 11th December 2013
6. Collins N, 'Britain faces 'public health time bomb'', Daily Telegraph, 30 October 2013
7. Derbyshire EJ, 'An intervention to improve cognition and hydration in UK school children using bottled water', 2012
8. Gandy J, 'First Findings of the United Kingdom Fluid Intake Study', Nutrition Today, July/August 2012
9. Griffiths C, Gately P, Marchant PR, Cooke CB, 'A five year longitudinal study investigating the prevalence of childhood obesity', Journal of Public Health, November 2013
10. Healthy Lives, Healthy People: A call to action on obesity in England, Department of Health, October 2011
11. Health & Social Care Information Centre, National Child Measurement Programme: England 2012/13
12. Health & Social Care Information Centre, Statistics on obesity, physical activity and diet (England), 2013
13. Public Health England, Health Survey for England 2010
14. Leibermann HR, 'Hydration and cognition: a critical review and recommendations for future research', Journal of the American College of Nutrition, 2007
15. 'Managing overweight and obesity in adults – lifestyle weight management services' (draft version). National Institute for Health and Care Excellence, 2013
16. 'Measuring Up: The Medical Profession's Prescription for the Nation's Obesity Crisis', Academy of Medical Royal Colleges, 2013
17. Michie S, 'Talking to primary care patients about weight: A study of GPs and practice nurses in the UK', Psychology, Health & Medicine, Vol. 12 Issue 5, 2007
18. National Health Service, 'The NHS Constitution', March 2013
19. Ng SW, Ni Mhurchu, C, Jebb S & Popkin B 'Patterns and Trends of Beverage Consumption Among Children and Adults in Great Britain, 1986– 2009', British Journal of Nutrition, 2012
20. NHS choices website (http://www.nhs.uk/Livewell/Goodfood/Pages/eatwell-plate.aspx)
21. 'Obesity falls in English schools', BBC News (www.bbc.co.uk/news/health-25331997), 12 December 2013
22. Ofsted, 'Beyond 2012: Outstanding physical education for all', February 2013
23. 'QOF Clinical Indicators 2013/14', eGuidelines.co.uk
24. Tate DF, Turner-McGrievy G, Lyons E, Stevens J, Erikson K, Polzien K, Diamond M, Wang X, Popkin B, 'Replacing calorific beverages with water or diet beverages for weight loss in adults', 2012 (randomised clinical trial)
25. Vlassopoulos A, Combet E & Lean, EJ, 'Changing distributions of body size and adiposity with age', International Journal of Obesity, 2013
26. Weiler R, Allardyce S, Whyte GP, Stamatakis , 'Is the lack of a physical activity strategy for children complicit mass child neglect?', British Journal of Sports Medicine, 9 December 2013

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